LNGT 0250
Morphology and Syntax

Transition from last class
• The building blocks of word structure in human language are called morphemes, which are the smallest units of meaning or grammatical function in a language.

Simple vs. complex words
• Some words are mono-morphemic: They consist of only one morpheme. These are simple words, e.g., book, man, above.
• Other words are multi-morphemic: They contain two or more morphemes. These are complex words, e.g., books, vigorous, unbelievable.
• Complex words are typically derived via either derivation or inflection.

Taxonomy of morphemes
• Morphemes can be free or bound.
• Bound morphemes can be either prefixes, suffixes, infixes, or circumfixes.
• Morphemes can be either inflectional or derivational.
• Content vs. function morphemes.
• Some bases (‘huckles and ceives’) can be bound.

Huckles and Ceives
“kempt” in unkempt
“luke” in lukewarm
“huckle” in huckleberry
“ceive” in deceive, perceive, receive
“mit” in submit, permit, commit

Infixation
• Some languages use infixes in derivation.

<table>
<thead>
<tr>
<th>Dataset 19. Katu (Vietnam)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. gap</td>
</tr>
<tr>
<td>2. just</td>
</tr>
<tr>
<td>3. panh</td>
</tr>
<tr>
<td>4. piih</td>
</tr>
</tbody>
</table>
Circumfixes

- Dutch: berg ‘mountain’ → ge-berg-te ‘mountain chain’
- We’ll see more examples of circumfixes when we talk about inflection.

Reduplication

- Javanese:
  - Full reduplication:
    - baita ‘ship’ → baita baita ‘various ships’
    - omaha ‘house’ → omaha omaha ‘various houses’
  - Partial reduplication:
    - goni ‘fire’ → gogoni ‘to warm oneself by the fire’
    - tamu ‘guest’ → totamu ‘to visit’
- Storage vs. computation by rule?

Morphological structure

- So, let’s divide some more words into morphemes first.
  - farmers
  - uninteresting
  - quantificational
- But there’s more to morphological structure than just identifying and counting the number of morphemes in a word.

Morphological structure

- Certain affixes combine with certain categories but not with others. See handout.
- The output of one affix-base combinatory operation can then serve as input for another, and so on and so forth. Morphological structure is recursive.
  - act + -ive → active
  - active + -ate → activate
  - de + activate → deactivate
  - deactivate + -(at)ion → deactivation
- Post-colonialism?

Morphological structure

- Speakers of a language know the internal structure of complex words and they know which derivational morphemes combine with which categories, and our morphological analysis has to account for this knowledge.
- For this, we represent morphological structure graphically in the form of tree diagrams.

Representing morphological structure

```
N
|   |
N Af
|   |
tiger -s

A
|   |
N Af
|   |
care -ful

V
|   |
Af A
|   |
re- new

V
|   |
V Af
|   |
visit -ed
```
Abbreviations and conventions

• N = noun
• A = adjective
• V = verb
• P = preposition
• Af = affix

Suffixes and prefixes are differentiated by the position of ‘‐’: ‐ness vs. re‐.

A note on drawing trees

• To draw trees on your computer, you’ll need to use ArborWin (for PC) or Arboreal (for Mac).
• Arboreal is installed on the 8 computers outside Wilson lab at the David Library. ArborWin is installed on the 8 computers in MBH116.
• Please do not use any of the drawing tools in Microsoft Word to draw the trees. These will not be accepted.

Morphological trees: farmers

```
N
   N Af
      -s
V Af
farm -er
```

Morphological trees: uninteresting

```
A
   Af A
un-
   N Af
interest -ing
```

Morphological trees: quantification

```
A
   N Af
      -al
V Af
-cation
N Af
quantity -ify
```

Let's draw some trees

• In small groups, draw trees for the following words on the board.
  • unreliability
  • misrepresentations
  • tranquilizers
Morphological trees

• Why are trees a better formal representation of word structure than simple linear segmentation?
• For two reasons:
  • First, trees capture our knowledge of constrains on derivational affixes (see handout). The hierarchical nature of trees allows us to capture these constraints.

Which is the correct tree for ‘unhappiness’?

(a) N _ Af N
   |    un- A Af
   |      happy -ness
(b) N
   | Af
   | un- happy

The puzzle of the ‘undoable’

• Second, trees also help us resolve interesting puzzles such as that of the ‘undoable.’
• What does ‘undoable’ mean?
• How does morphological analysis capture this fact?
• In your groups, draw trees for ‘undoable.’

Next class agenda

• Compounding and other morphological processes.
• We start talking about inflection: Lieber Chapter 6